

Normal somatic cells

1. Regulated activation of pRb-kinases (Cdks)
2. pRb phosphorylation
3. Derepression of genes required for G1-S progression

Embryonic cells
(tumour cells)

1. no regulated pRb kinase (Cdk2-cyclinE)
2. pRb constitutively hyper-phosphorylated
3. E2F target genes constitutively active

Figure 1

Remodelling of the cell cycle during embryonic development/differentiation

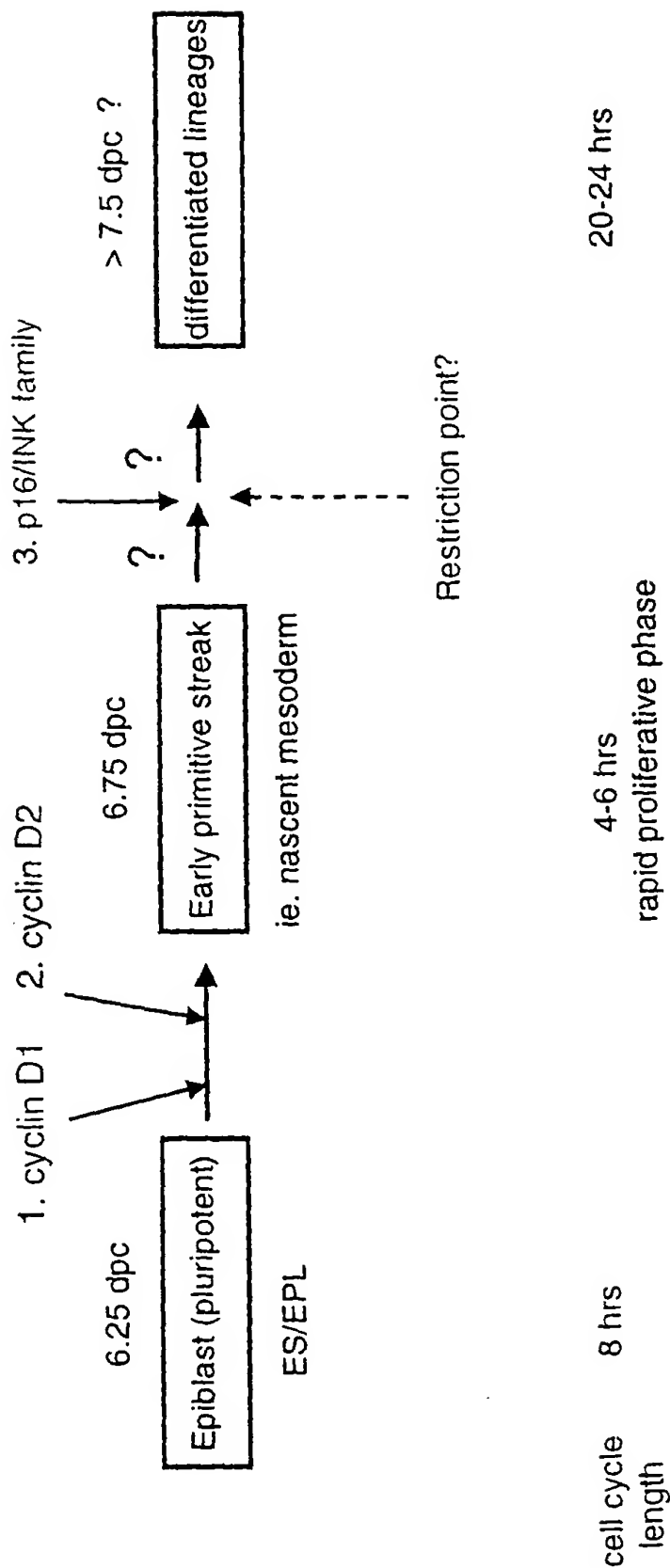


Figure 2

Figure 3

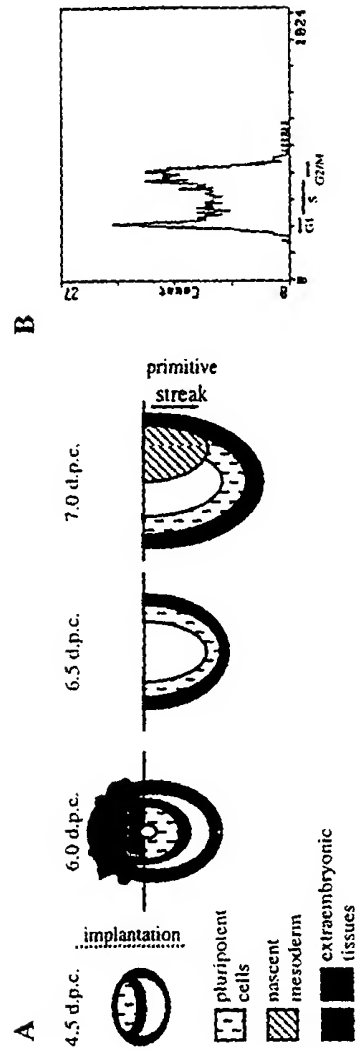
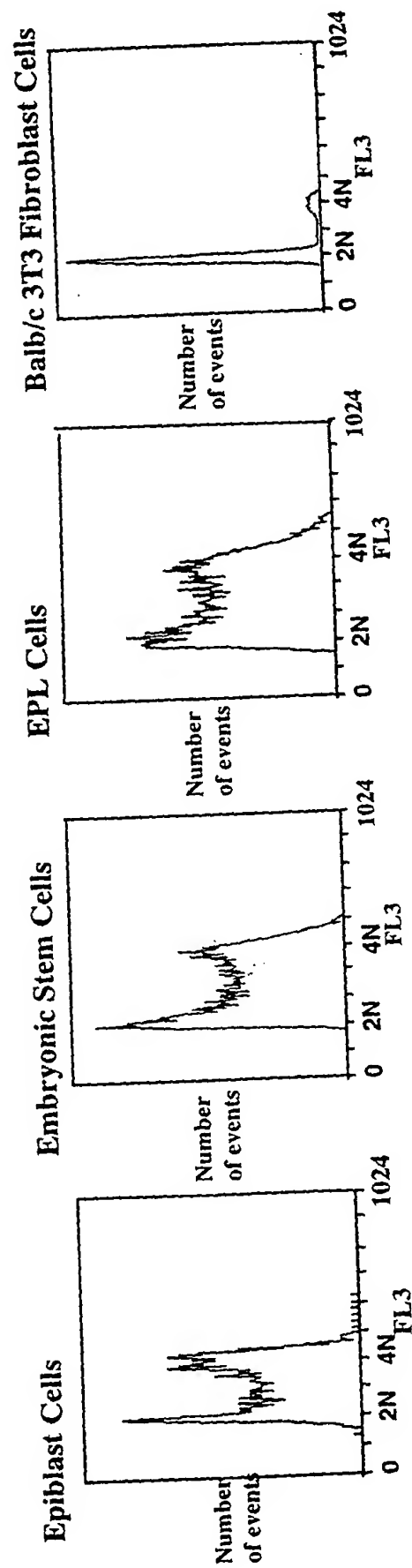


Figure 4



Epiblast Cells (4.4 hours)

G1	S	G2/M
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Embryonic Stem Cells (10 hours)

G1	S	G2/M
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EPL Cells (8-10 hours)

G1	S	G2/M
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Balb/c 3T3 Fibroblast Cells (24 hours)

G1	S	G2/M
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Figure 5
Cell cycle remodelling during differentiation of cells in embryoid bodies

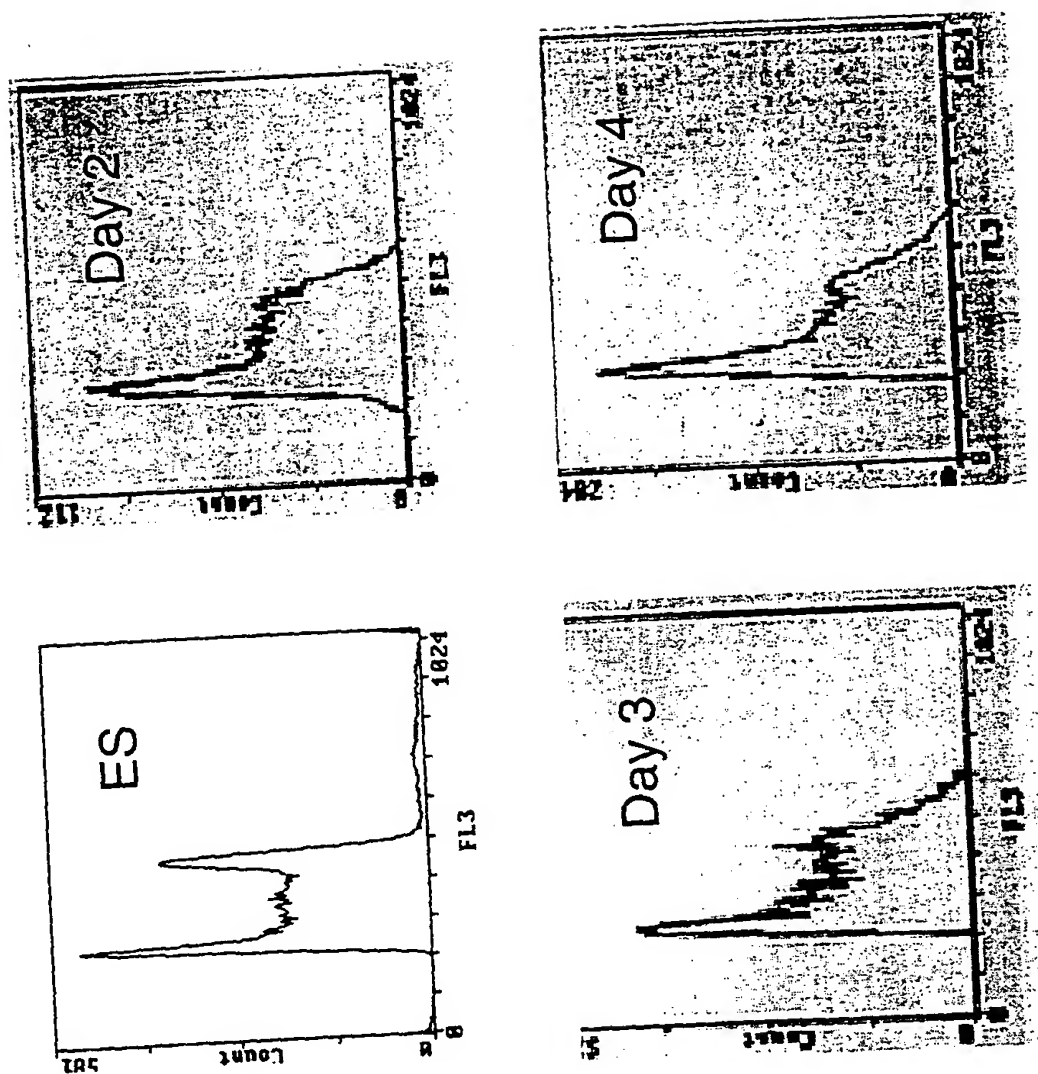
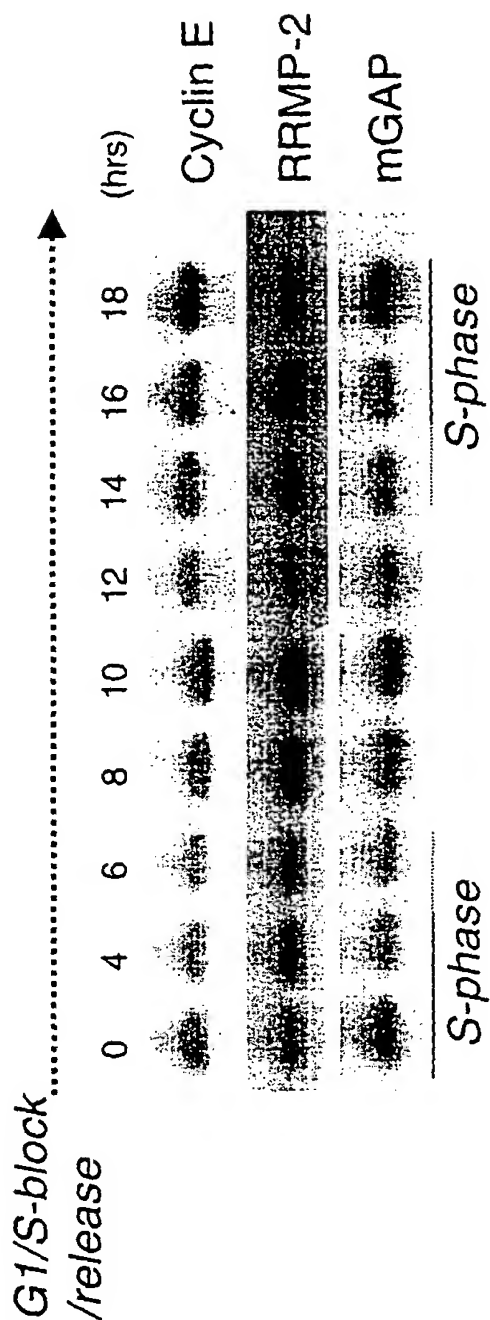


Figure 6

E2F target genes are not cell cycle regulated in ES cells



Cell cycle regulation of E2F transcripts in mouse fibroblasts

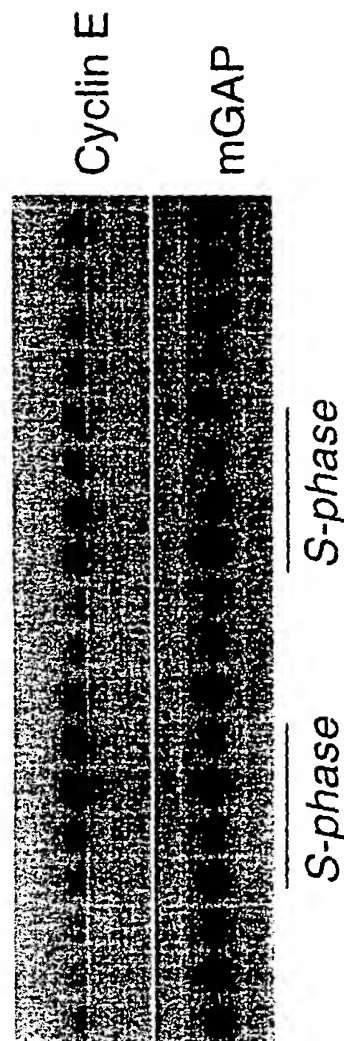
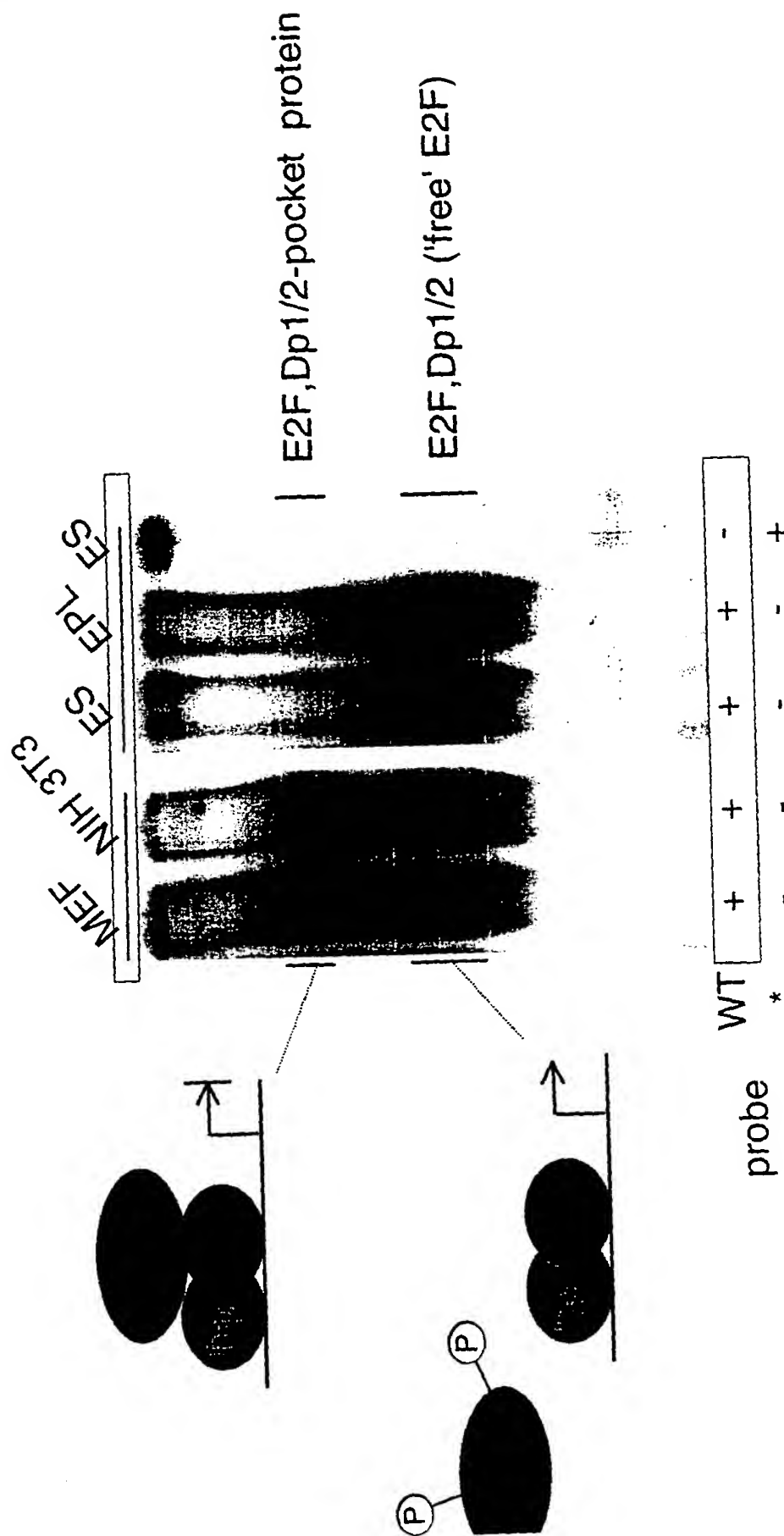


Figure 7



E2F complexes in pluripotent cells are predominantly free of pRb family members.

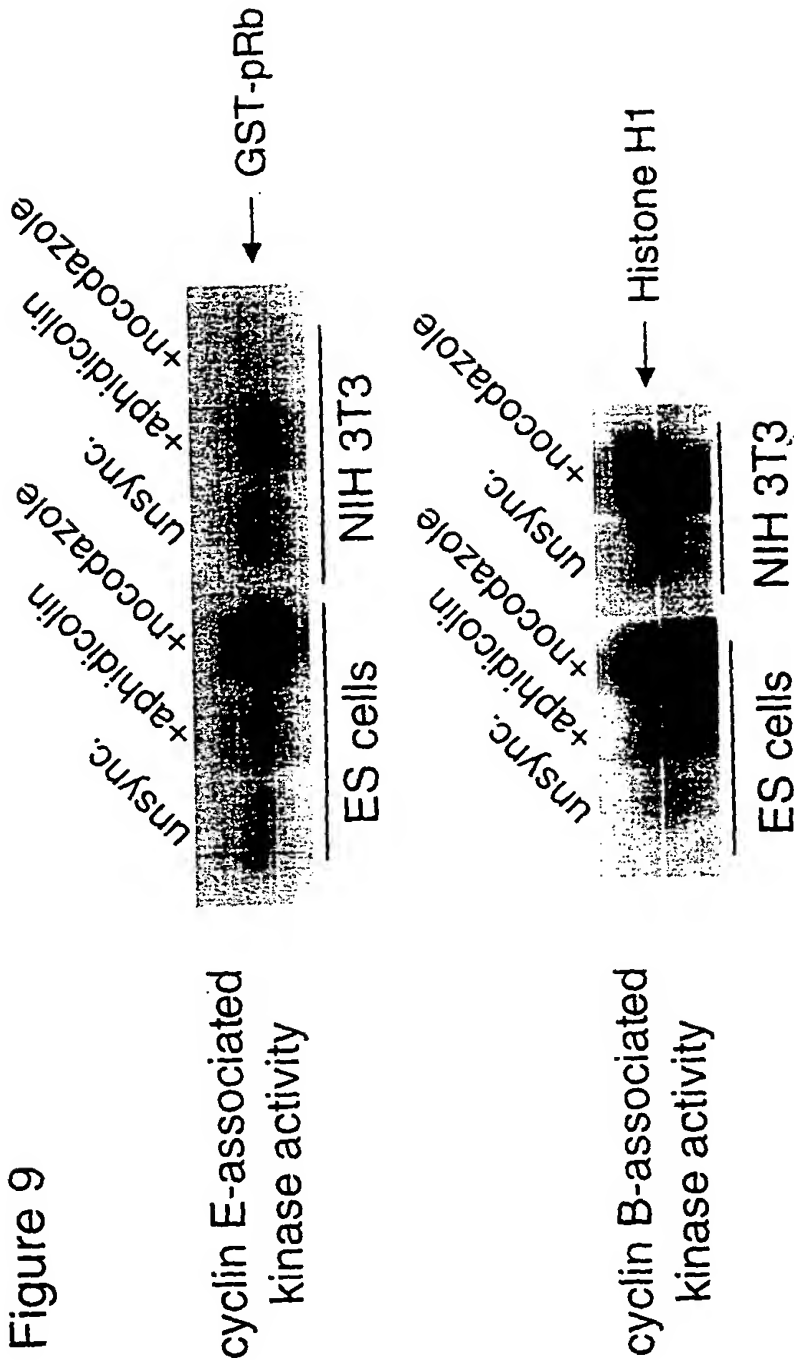


Figure 10

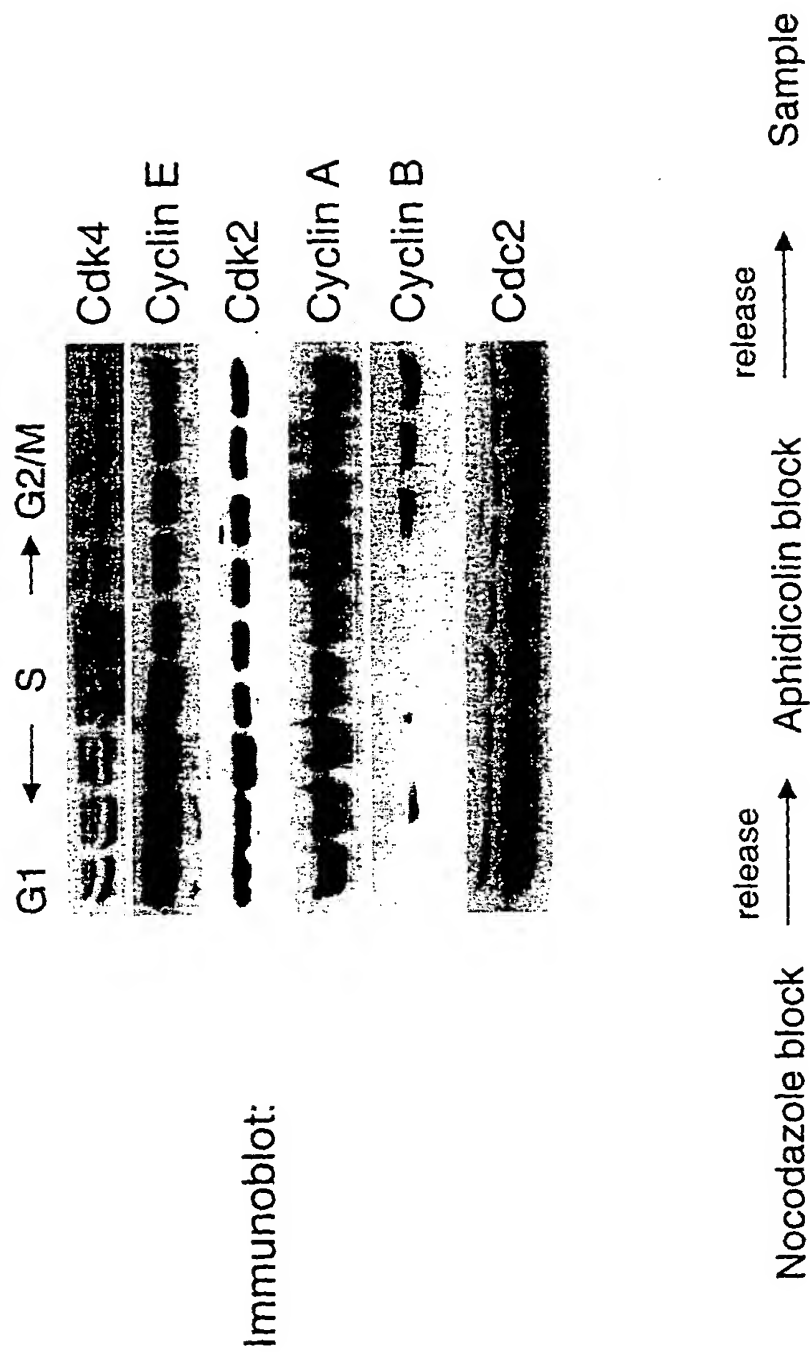
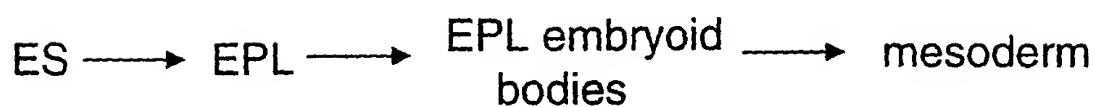
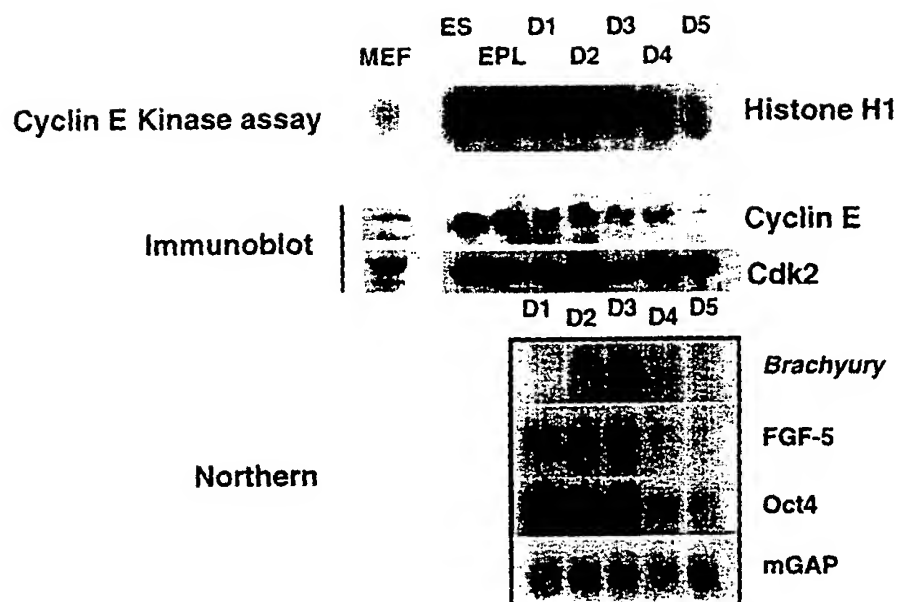


Figure 11



Cyclin E and cyclin A associated kinase activities collapse during differentiation

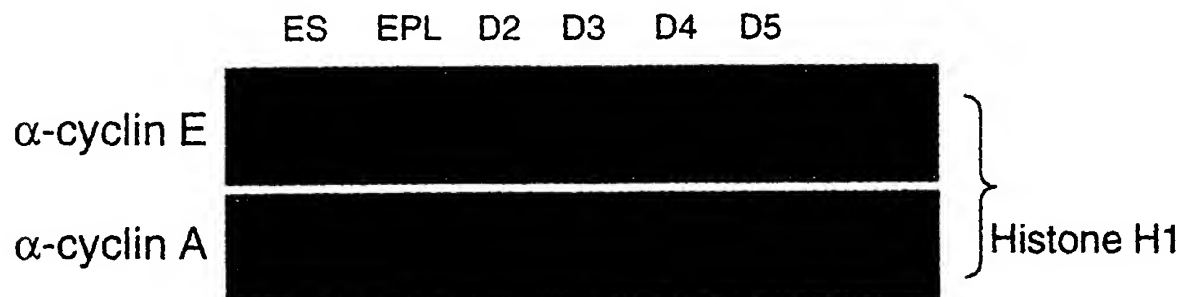


Figure 12

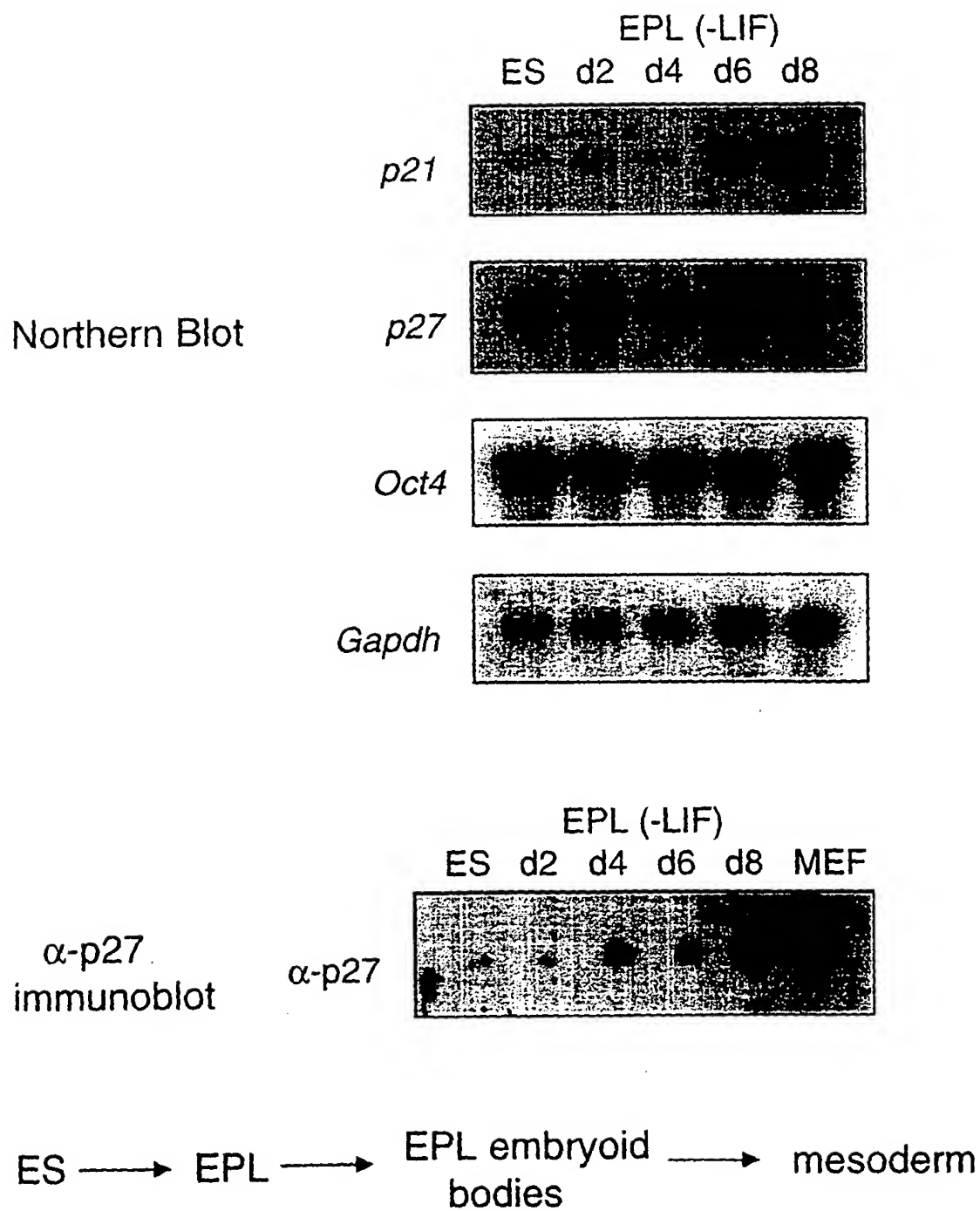


Figure 13

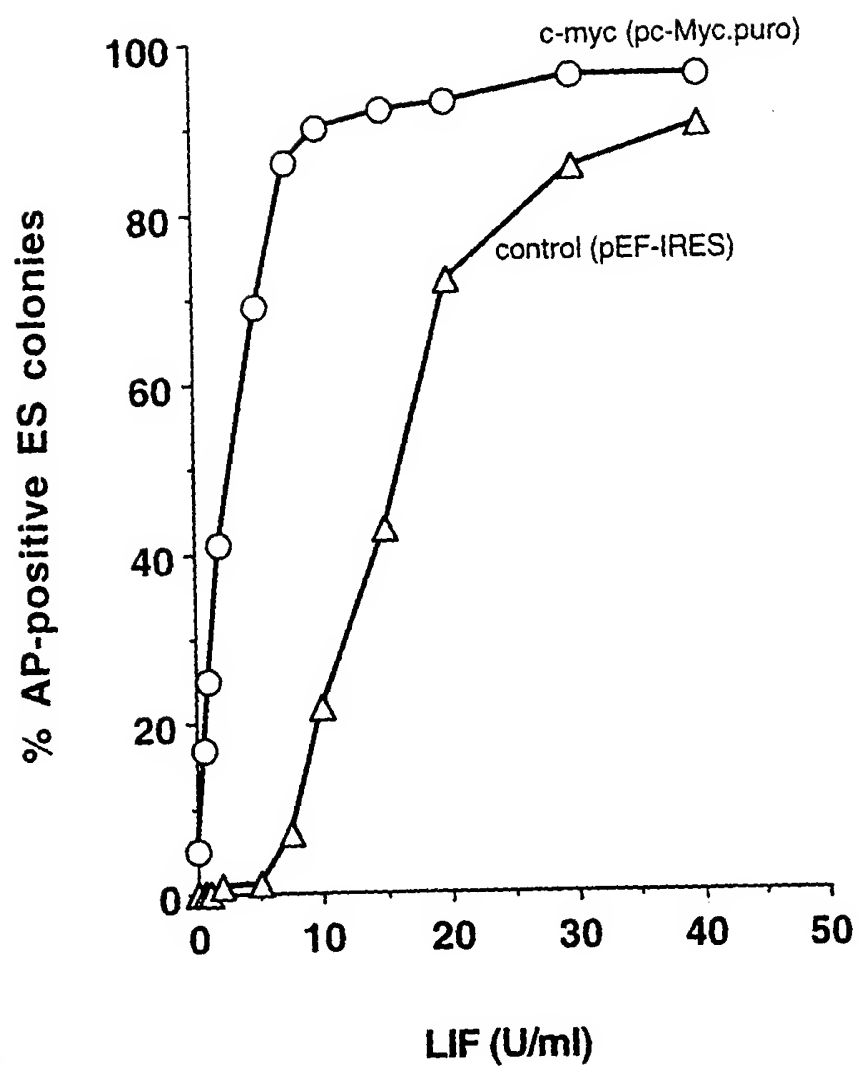


Figure 14

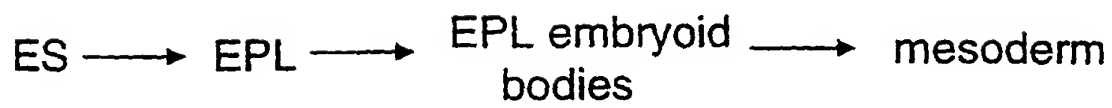
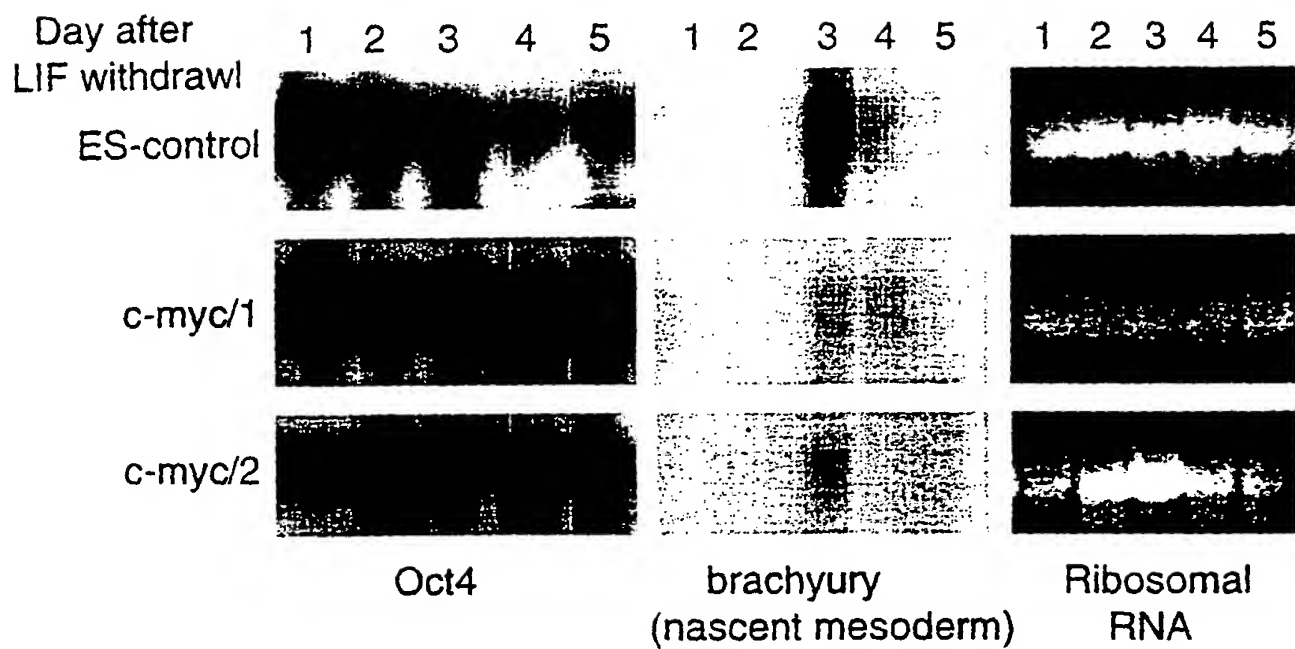


Figure 15

